

DEPARTMENT OF THE ARMY  
Missouri River Division, Corps of Engineers  
P. O. Box 103, Downtown Station  
Omaha, Nebraska 68101

MRD-R 1130-2-4

MRDOP

Regulation  
No. 1130-2-4

11 February 1974

PROJECT OPERATIONS

Project Design and Construction Records

1. Purpose. This regulation establishes policies, procedures and requirements for maintaining permanent project records so that adequate operating or engineering data and drawings will be available for each project, particularly if control responsibility during project life span should be transferred from one supervisory office to another.

2. Applicability. This regulation is applicable to all flood control, navigation, reservoir and multiple-purpose projects operated or maintained by the Corps of Engineers within the Missouri River Division.

3. References.

- a. ER 1110-2-100.
- b. ER 1110-2-1200.
- c. ER 1130-2-304.
- d. AR 340-18-1.
- e. AR 340-18-15.

4. Unmanned Projects. The requirements for maintaining records for unmanned projects are the same as for manned projects except that the location of the complete permanent record file will be at the applicable manned supervisory office. Such data as is required for emergency operation of the facilities will be maintained at the unmanned project site. Emergency procedure signs, drawings, and data sheets required for operating unmanned facilities shall be of moisture-proof material if stored or mounted in moist locations at unmanned sites.

5. Manned Projects. Each project office, which has or will have an operating staff, will maintain a permanent record file which will include as a minimum the following items:

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This Regulation supersedes MRD-R 1130-2-4 dated 1 June 1970.

- a. Design Memoranda and minutes of Consulting Board Meetings.
- b. Plans and specifications for principal relocation contracts if continuing involvement is anticipated.
- c. Settlement and piezometer gage readings.
- d. Engineering records and files required by Appendix A to ER 1110-2-100 covering periodic inspection and continuing evaluation of completed Civil Works projects.
- e. Specifications for each supply or construction contract, together with all change orders or supplemental agreements and drawings as outlined under subparagraph f, below.
- f. Prints of "as constructed" drawings required by paragraph 20 of ER 1110-2-1200 covering plane and specifications for Civil Works projects. These will include all contract drawings, approved shop drawings, equipment instruction manuals, erection drawings, composite operational drawings and monolith, lift or pour drawings when such have been utilized during construction. The record file will also include all additional drawings or drawing revisions necessary to show all changes to the facilities during operation.
- g. Project Operations Manual as required by ER 1130-2-304.
- h. Such other records and drawings as are necessary for a complete record of the facility as originally constructed and all revisions thereto.

6. General Instructions.

- a. Data and drawings will be stored in appropriate cabinets, shelves, map-type drawer files or similar inclosure which will permit easy access by project personnel. Tracings will be stored in flat drawer-type files and not rolled or folded. The storage areas should be clean and dry. Room dehumidification should be provided if high summer humidity has been a problem in the storage location. Data and drawings required for long-term storage should be shielded from direct sunlight.
- b. Drawings, data, and specifications, whether stored at district or project offices, shall be suitably organized and storage facilities labeled for identification. Where tracings are stored at power plants, the filing system shall, insofar as practicable, be compatible with the system in use for the district office tracing or microfilm files. A records management control system should be established to assure the logging of items loaned from the record files.

c. Data sheets or prints that have become tattered from use should be replaced. Drawing prints should be of a type that is suitable for long-term storage. Prints selected for storage should be relatively insensitive to light. If sensitivity to light is questioned, such as prints made by same single-bath photographic processes, a portion of a print should be check-tested for type by exposure for eight hours in direct starlight. Any prints failing this test should be replaced.

#### 7. Drawing Tracings.

a. For the purposes of this regulation, a tracing is considered to be any manually-produced ink or pencil diagram, layout or graphic illustration produced on transparent material or any reproduction process copy on transparent or translucent material which can be modified with ink or pencil. Tracings, whether stored at the district office, project office, or authorized storage facility, should be of acceptable quality. Tracings should be free of opaque areas, should have linework and lettering with good clarity, and should be made on paper or other material suitable for long-term storage. Oiled paper is not considered suitable for long-term storage. (See subparagraph d below.)

b. Tracings for hydroelectric power plants will be stored at the power plant in accordance with subparagraph 20d of ER 1110-20-1200. Reproducibles, such as microfilm copies will be made for district office use. If there is a continuing need for certain tracings at the district office for the purpose of preparing plans and specifications for additional construction work, for use in the preparation of composite operational drawings, or where distances to same projects are excessively long and transportation facilities poor, then these repetitively used tracings may be stored at the district office.

c. If only prints are available for plant equipment requiring maintenance or system interconnections, then permanent tracings of mylar or equal should be made from these prints. (e.g., Instruction Book Drawings)

d. Tracings to be furnished under supply and construction contracts for reservoir and multi-purpose projects should be fully described in the contract specifications so that completely adequate tracings can be obtained under the terms of each contract without extra cost. Original paper tracings, mylar tracings or equal should be specified. If lift or pour drawings are needed, the specifications should require that the original tracing be furnished to the Government. A single tracing may be utilized for several pours or lifts.

#### 8. Maintenance of Project Records.

a. Drawings, data and manuals should be periodically or continually updated to show current conditions, either by marked corrections to affected data or by replacement of superseded information. Where multiple files are maintained at a project, one file shall be designated as the Master Record File.

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b. When field revisions have been made, two copies of all affected prints shall be marked to show additions, deletions or other changes. One marked print should remain at the project and the other print (with tracing, if available) should be forwarded to the appropriate drafting office for correction of the tracing. After receipt of the corrected print (and tracing, if forwarded) all prior copies should be destroyed

9. Responsibilities - District Offices.

a. Applicable elements of district offices, including engineering, construction, operations and supply divisions are responsible for reviewing specifications covering drawings and data to be furnished under a contract to assure that data and drawing prints will be complete and technically correct and that drawing tracings will be made of quality material suitable for permanent storage.

b. Each district office will be responsible for assuring that an inventory of design records, drawings and other required data is prepared and updated annually. If supervision of a function is transferred within a district, from one district to another, or from the Corps of Engineers to another agency, the affected office losing the facility will be responsible for assuring that all required records for the facility are current when transferred to the supervisory office acquiring responsibility.

FOR THE DIVISION ENGINEER:

/s/

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DISTRIBUTION:

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